AMENDMENTS TO THE CLAIMS

Upon entry of the present amendment, the status of the claims will be as shown below. This listing of claims replaces all previous versions and listings of claims in the present application.

Listing of Claims

1. – 24. (Cancelled)

25. (New) A method for composing a data compartment aggregation packet frame, comprising:

generating a first data compartment, including a compartment identifier provided with a compartment recipient address representing an address of a first station, a service data, and a frame check sequence compartment;

generating a second data compartment, including a compartment identifier provided with a compartment recipient address representing an address of a second station, a service data, and a frame check sequence compartment;

combining the first and second data compartments to define a data carriage;

generating a carriage header that is located in front of the data carriage to define a carriage;

generating a MAC header that is located in front of the carriage, the MAC header including a portion allocated with a unique bit pattern and a portion that stores a non-unicast recipient address associated with the first station and the second station; and

generating a frame check sequence for error detection in the MAC header and the carriage.

26. (New) A composing apparatus that composes a data compartment aggregation packet frame, comprising:

a first generator, operable to generate a first data compartment having a compartment identifier provided with a compartment recipient address representing an address of a first station, a service data, and a frame check sequence compartment;

a second generator, operable to generate a second data compartment having a compartment identifier provided with a compartment recipient address representing an address of a second station, a service data, and a frame check sequence compartment;

a combiner, operable to combine the first and second data compartments to define a data carriage;

a carriage header generator, operable to generate a carriage header that is located in front of the data carriage to define a carriage;

a MAC header generator, operable to generate a MAC header that is located in front of the carriage, the MAC header including a portion allocated with a unique bit pattern and a portion that stores a non-unicast recipient address associated with the first station and the second station; and

a frequency check sequence generator, operable to generate a frame check sequence for error detection in the MAC header and the carriage.

27. (New) A method for decomposing, in a decomposing apparatus, a data compartment aggregation packet frame having a MAC header, a carriage header and a plurality of data compartments, the decomposing method comprising:

detecting a non-unicast recipient address, which is associated with a plurality of stations including a station with the decomposing apparatus and a unique bit pattern located in a MAC header;

separating the plurality of data compartments; and

processing all of the separated data compartments, including a data compartment with a compartment identifier provided with a compartment recipient address, which represents an address of the station with the decomposing apparatus.

28. (New) A decomposing apparatus that decomposes a data compartment aggregation packet frame having a MAC header, a carriage header and a plurality of data compartments, comprising:

a detector, operable to detect a non-unicast recipient address which is associated with a plurality of stations including a station with said decomposing apparatus and a unique bit pattern located in a MAC header;

a separator, operable to separate the plurality of data compartments; and

a processor, operable to process all of the separated data compartments, including a data compartment with a compartment identifier provided with a compartment recipient address, which represents the address of the station with said decomposing apparatus.

29. (New) A computer readable medium encoded with a data compartment aggregation packet frame, comprising:

a first data compartment, including a compartment identifier provided with a compartment recipient address representing an address of a first station, a service data, and a frame check sequence compartment;

a second data compartment, including a compartment identifier provided with a compartment recipient address representing an address of a second station, a service data, and a frame check sequence compartment, the first and second data compartments being aligned to define a data carriage;

a carriage header, located in front of the data carriage to define a carriage;

a MAC header, located in front of the carriage, the MAC header including a portion allocated with a unique bit pattern and a portion for storing a non-unicast recipient address associated with the first station and the second station; and

a frame check sequence for error detection in the MAC header and the carriage.